

Advantages

The E911 rule sets national standards and deadlines to ensure that all cellular carriers throughout the United States will provide E911 services in a timely manner. At the same time, the rule is technologically and competitively neutral because it allows carriers and equipment manufacturers to determine the best method to implement E911 capability. Allowing manufacturers and carriers to adopt the technology of their choice encourages the parties to arrive at a solution that is both effective and cost-efficient. This location technology can also be used for commercial features and services.

Disadvantages

The E911 rule imposes administrative, technical, and economic costs on carriers who must deploy location technology and transmission capability to comply with the rule.

Recent Efforts

The Commission continues to promote the deployment of wireless E911 service as rapidly and universally as possible, and to address implementation problems as they arise. In a November 2002 order, the Commission further clarified the requirements for a valid PSAP request and established procedures to encourage cooperative deployment efforts.¹³⁷ Where major carriers fell behind schedule or requested additional time, the Commission negotiated consent decrees which provided penalties for failure to comply and set specific enforceable future Phase II deployment schedules.¹³⁸

In March 2003, the Commission launched its E911 Coordination Initiative, which brought together E911 stakeholders for a series of meetings to share experiences and devise strategies for expediting E911 deployment.¹³⁹ To monitor progress, the Commission required major wireless carriers to file quarterly reports in a spreadsheet format and has worked to improve the accuracy and utility of this data.¹⁴⁰

Recognizing the special challenges often encountered by the smallest wireless carriers, the Commission allowed additional time for those carriers to deploy Phase II and opened a filing window to receive additional information to support requests for relief in an October 2003 Order.¹⁴¹

¹³⁷ Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, 17 FCC Rcd 24282 (2002).

¹³⁸ AT&T Wireless Services, Inc., *Order and Consent Decree*, 17 FCC Rcd 11510 (2002); Cingular Wireless LLC, *Order and Consent Decree*, 18 FCC Rcd 11746 (2003); T-Mobile USA, Inc., *Order and Consent Decree*, 18 FCC Rcd 15123 (2003).

¹³⁹ See <http://wireless.fcc.gov/outreach/e911/>

¹⁴⁰ See, e.g., Public Notice, WTB Announces Updates and Enhancements to FCC'S Master Public Safety Answering Point (PSAP) Registry, DA 04-2255, 19 FCC Rcd 13820 (2004).

¹⁴¹ Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, 18 FCC Rcd 20987 (2003).

The Commission also took action to upgrade wireless handsets for 911 calls. In a November 2003 *Order*, the Commission directed the programming of carrier-donated and other 911-only handsets to alert PSAP dispatchers that call-back might not be possible.¹⁴² In a July 2004 *Order*, the Commission clarified its rules requiring that manufacturers incorporate improved methods of completing 911 calls into analog wireless handsets.¹⁴³

The Commission also continues to consider additional steps to improve public safety. In November 2003, the Commission clarified and expanded the scope of the E911 rules for other services, including mobile satellite services, telematics, and resold services, as well as for equipment such as disposable phones and PDAs.¹⁴⁴

Comments

No comments were filed with respect to this rule.

Recommendation

As stated above, the purpose of section 20.18 is to enhance public safety and facilitate effective and efficient law enforcement. As such, the need for and purposes for this section are not affected by competitive developments that guide our Section 11 analysis. We accordingly do not find that the rule is “no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service.”

¹⁴² Revision of the Commission’s Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems; Non-Initialized Phones, CC Docket No. 94-102, 18 FCC Rcd 23383 (2003)

¹⁴³ Revision of the Commission’s Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems; 911 Call Processing Modes, CC Docket No. 94-102, WT Docket No. 99-328, 19 FCC Rcd 13448 (2004).

¹⁴⁴ Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, *Report and Order and Second Further Notice of Proposed Rulemaking*, CC Docket No. 94-102, IB Docket No. 99-67, 18 FCC Rcd 25340 (2003).

PART 20, SECTION 20.19 – HEARING AID COMPATIBLE MOBILE HANDSETS**Description**

Section 20.19 requires CMRS providers and manufacturers of wireless phones to comply with guidelines established by the Commission for the implementation of the Hearing Aid Compatibility (HAC) Act.¹⁴⁵ The Commission requires compliance by all such providers and manufacturers to ensure that individuals with hearing disabilities receive the benefits of wireless telecommunications – including emergency, business, and social communications – thereby increasing the value of the wireless network for all Americans.

The rules state that a wireless phone is hearing aid compatible if it meets certain performance levels set forth in a technical standard established by the American National Standards Institute (ANSI). For radio frequency (RF) interference, the rules require certain digital wireless phone models to provide reduced RF interference (*i.e.*, meet a “U3” rating under the ANSI standard), and require certain digital wireless phone models to provide telecoil coupling capability (*i.e.* meet a “U3T” rating under the ANSI standard).

To ensure a smooth transition, the Commission adopted a phased approach for manufacturers and carriers to comply with the requirements for the wireless handsets. First, manufacturers and CMRS providers must offer at least two handset models for each air interface offered by September 16, 2005. Second, they must ensure that 50% of their handset offerings for each air interface offered comply with the Commission’s RF interference rules by February 18, 2008. Third, each manufacturer and CMRS provider must offer at least two handset models for each air interface that complies with the Commission’s inductive coupling rules by September 18, 2006. Finally, they must provide the models for testing in carrier-owned stores. To accommodate small business concerns, the Commission adopted a *de minimis* exception that exempts, from the HAC requirements, manufacturers or service providers that offer two or fewer digital wireless handset models in the U.S.

This rule section provides that states that adopt Section 20.19 of the Commission’s Rules may enforce the rule. Accordingly, the Commission requires State personnel to attempt to resolve a complaint within thirty days of the filing of a complaint. In instances where a state does not adopt this rule section or fails to act within six months from the filing of a complaint, the Commission will accept complaints.

Purpose

The purpose of section 20.19 is to facilitate access to telecommunications services for individuals with hearing disabilities thereby ensuring that individuals with hearing disabilities have access to the same public safety, social, professional, and convenience benefits offered by wireless telecommunications to all Americans.

¹⁴⁵ 47 C.F.R. § 20.19.

Analysis

Status of Competition

Because the purpose of section 20.19 is to facilitate access to telecommunications services for individuals with hearing disabilities by providing guidance to manufacturers, service providers, consumers and other members of the telecommunications industry regarding HAC implementation requirements, general competitive developments in the services to which the rule applies do not affect the need for this rule.

Advantages

Section 20.19 establishes hearing aid compatibility rules and implementation requirements to ensure the universal availability of hearing aid compatible handsets within an established time-frame.

Disadvantages

Section 20.19 imposes administrative, technical, and economic costs on manufacturers and service providers who must take the necessary steps to comply with the Commission's rules.

Recent Efforts

41. The Commission remains committed to the extension of the benefits of wireless telecommunications to individuals with hearing disabilities. In order to permit digital wireless telecommunications access to every American, the Commission is actively participating in an on-going dialogue with others in the telecommunications industry to achieve this goal. The Commission has been working with such groups as ATIS, CTIA, and FDA. The Commission's Disability Rights Office and the Consumer Affairs and Outreach Division of the Consumer and Governmental Affairs Bureau, have been actively involved in outreach efforts to ensure that consumers are informed of the steps the Commission takes in this area. A major focus of these outreach efforts has been coordination between representatives of government, including the Commission, and others in the telecommunications industry to develop mechanisms to educate consumers and to obtain consumer feedback as to what their hearing aid compatibility needs are and how those needs can best be satisfied. Working groups have been created that are examining various alternatives in terms of testing, labeling and reporting.

Comments

No comments were filed with respect to this rule.

Recommendation

As stated above, the purpose of section 20.19 is to facilitate access to telecommunications services for individuals with hearing disabilities by providing guidance to manufacturers,

service providers, consumers and other members of the telecommunications industry regarding HAC implementation requirements. As such, the need for and purposes for this section are not affected by competitive developments that guide our Section 11 analysis. We accordingly do not find that the rule is “no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service.”

**PART 20, SECTION 20.20 – CONDITIONS APPLICABLE TO
PROVISION OF CMRS SERVICE BY INCUMBENT
LOCAL EXCHANGE CARRIERS**

Description

Section 20.20¹⁴⁶ required incumbent LECs (ILECs) providing in-region broadband CMRS to provide such services through a separate affiliate. The rule imposed restrictions on the separate affiliate, including: (1) maintaining separate books of account; (2) not jointly owning transmission or switching facilities with the affiliated ILEC that the ILEC uses for the provision of local exchange services in the same market; and (3) acquiring any services from the affiliated ILEC on a compensatory arm's length basis pursuant to our affiliate transaction rules.¹⁴⁷

This separate affiliation rule sunset on January 1, 2002.

Comments

No comments were filed with respect to this rule.

Analysis

Because this rule is no longer in effect, no review is required as part of this Biennial Review. Staff recommends that this rule be removed from the Code of Federal Regulations.

¹⁴⁶ 47 C.F.R. § 20.20.

¹⁴⁷ 47 C.F.R. § 20.20(a).

PART 21 – DOMESTIC PUBLIC FIXED RADIO SERVICES**Description**

Part 21 has been deleted by the *EBS/BRS Report and Order*.¹⁴⁸ New rules for Multipoint Distribution Service (MDS) operations (now renamed the Broadband Radio Service) are in Part 27 of the Commission's rules.

¹⁴⁸ Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands; Part 1 of the Commission's Rules - Further Competitive Bidding Procedures; Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and the Instructional Television Fixed Service Amendment of Parts 21 and 74 to Engage in Fixed Two-Way Transmissions; Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Licensing in the Multipoint Distribution Service and in the Instructional Television Fixed Service for the Gulf of Mexico; WT Docket Nos. 03-66, 03-67, 02-68, MM Docket No. 97-217, *Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 14165 (2004) (*EBS/BRS Report and Order*).

PART 22 – PUBLIC MOBILE SERVICES

Description

Part 22¹⁴⁹ contains licensing, technical, and operational rules for five CMRS services collectively referred to as Public Mobile Services. These services are the Paging and Radiotelephone Service, the Cellular Radiotelephone Service, the Rural Radiotelephone Service, the Air-Ground Radiotelephone Service, and the Offshore Radiotelephone Service. In general, the rules in this part: (1) specify the frequency bands allocated to each service; (2) provide methods for determining the protected service area of stations in each service; (3) establish minimum construction or coverage requirements for licensees; and (4) define technical limits on operation (*e.g.*, transmitter power) to reduce the likelihood of interference.

Part 22 comprises 10 subparts:

Subpart A - Scope and Authority

Subpart B - Licensing Requirements and Procedures

Subpart C - Operational and Technical Requirements

Subpart D - Developmental Authorizations

Subpart E - Paging and Radiotelephone Service

Subpart F - Rural Radiotelephone Service

Subpart G - Air-Ground Radiotelephone Service

Subpart H - Cellular Radiotelephone Service

Subpart I - Offshore Radiotelephone Service

Subpart J - Required New Capabilities Pursuant to the Communications Assistance for Law Enforcement Act (CALEA)

Subparts A, B, and C apply generally to all Part 22 licensees. Subpart D provides for the licensing on a developmental basis of stations that are to be used for testing new technologies or services. Each of the next five subparts (subparts E through I) contains rules applicable to one of the five specific Part 22 services. Finally, subpart J implements the provisions of the Communications Assistance for Law Enforcement Act (CALEA) as they apply to Part 22 services.

Purpose

Part 22 of the Commission's rules comprises a minimal regulatory framework that facilitates the rapid, efficient provision of commercial wireless telecommunications

¹⁴⁹ 47 C.F.R. Part 22.

services to the general public at reasonable rates, by: (1) utilizing a competitive bidding process to issue exclusive licenses to the service provider applicants who value them most; (2) preserving and enhancing competition among these service providers once licensed; (3) ensuring that available spectrum allocations are used efficiently; and (4) reducing the likelihood of harmful interference between licensed stations.

Analysis

Status of Competition

As detailed in the *Ninth CMRS Competition Report*, CMRS providers, including those licensed under Part 22, operate in an environment that is marked by increased competition, innovation, lower prices for consumers, and increased diversity of service offerings.¹⁵⁰ Mobile telephony operators experienced strong growth and competitive development and continued to build out their footprints, deploy their networks in an increasing number of markets, expand their digital networks, and develop innovative pricing plans. Competition within the mobile data industry is developing successfully, as evidenced by the multitude of dynamic services, service packages, and pricing plans.

Advantages

Overall, the Part 22 rules provide a clear, predictable structure for the assignment and use of spectrum. In Part 22, provision for accepting competing mutually exclusive applications and selecting the licensee by means of competitive bidding results in licenses being issued to the entities that value them the most. Geographic area licensing minimizes the amount of paperwork involved in obtaining a license and thus speeds the authorization of new competitive services to the public. Minimal and flexible technical standards facilitate the introduction of new technologies.

Disadvantages

The Part 22 rules impose administrative burdens inherent to the licensing process and necessary for compliance with technical and operational rules. The technical standards in most Part 22 services place the burden of coordination on the licensees themselves.

Recent Efforts

In December 2002, the Commission released a *Notice of Inquiry* that sought comment on the effectiveness of its existing regulatory tools in promoting service to rural areas and asked how the Commission's policies could be modified to further encourage the provision of wireless services in rural areas.¹⁵¹ In a follow-up *Notice of Proposed Rule Making*, released in October 2003, the Commission sought to build upon the record

¹⁵⁰ *Ninth CMRS Competition Report*, FCC 04-216 at ¶¶ 167-197 (2004).

¹⁵¹ Facilitating the Provision of Spectrum-Based Service to Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services, WT Docket No. 03-281, *Notice of Inquiry*, 17 FCC Rcd 25554 (2002) (*Rural NOI*).

developed in response to the *Rural NOI* and sought comment regarding a variety of proposals to eliminate unnecessary regulatory barriers and encourage the deployment of spectrum-based services in rural areas.¹⁵² The *Rural NPRM* focused on measures that would increase flexibility, reduce regulatory costs of providing service to rural areas, and promote access to both spectrum and capital resources for entities seeking to provide wireless services in rural areas. On September 27, 2004, the Commission issued the *Rural R&O and FNPRM*.¹⁵³ In that Order, the Commission affirmed its conclusion that market-oriented policies, in tandem with capital investment by licensees, have led to the growth of valuable, productivity-enhancing wireless services to the vast majority of Americans, including many who reside, work, or travel in rural areas. The Commission determined, however, that additional steps are still needed to promote greater deployment of wireless services in rural areas, such as eliminating disincentives to serve or invest in rural areas, and helping to reduce the costs of market entry, network deployment and continuing operations. Therefore, the Commission adopted several measures designed to increase carrier flexibility, reduce regulatory costs of providing service to rural areas, and promote access to both spectrum and capital resources for entities seeking to provide or improve wireless services in rural areas. In addition, the Commission eliminated the cellular cross interest rule (22.942) in Rural Service Areas, which substantially limited the ability of parties to have interests in cellular carriers on different channel blocks in the same rural geographic area.

In April 2003, the Commission released a *Notice of Proposed Rulemaking*, initiating a reexamination of its rules governing the Air-Ground Radiotelephone Service.¹⁵⁴ The Commission also, partly to fulfill its biennial review responsibilities, proposed to revise or eliminate certain Part 22 Public Mobile Services rules that have become obsolete as the result of technological change, increased competition in the CMRS, supervening changes to related Commission rules, or a combination of these factors. On December 15, 2004, the Commission adopted an *Order*, which substantially revised the rules governing the Air-Ground Radiotelephone Service.¹⁵⁵ In that same *Order*, the Commission also eliminated or streamlined numerous other Part 22 rules pertaining to Licensing Requirements and Procedures, Operational and Technical Requirements, Developmental Authorizations, as well as the Paging and Radiotelephone Service, the Rural Radiotelephone Service, and the Offshore Radiotelephone Service. In addition, on December 15, 2004, the Commission adopted a Notice of Proposed Rulemaking consider whether to revise or eliminate its current ban on the use of cellular telephones on airborne aircraft.¹⁵⁶

¹⁵² *Rural NPRM*, 18 FCC Rcd 20802 (2003).

¹⁵³ *Rural R&O and FNPRM*, 19 FCC 19078 (2004).

¹⁵⁴ In the Matter of Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services, Biennial Regulatory Review – Amendment of Parts 1, 22, and 90 of the Commission's Rules, *Notice of Proposed Rulemaking*, 18 FCC Rcd 8380 (2003).

¹⁵⁵ See FCC News Release, *FCC Paves the Way for New Broadband Services in the Air* (rel. Dec. 15, 2004).

¹⁵⁶ FCC News Release, *FCC to Examine Ban on Using Cellular Telephones on Airborne Aircraft* (rel. Dec. 15, 2004).

Comments

No comments were filed with respect to this rule part.

Recommendation

The Part 22 general licensing and technical rules establish general procedural and technical requirements applicable to our many Part 22 licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, pursuant to our Section 11 biennial review, we do not find that this rule subpart is “no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service.”

PART 22, SUBPART E – PAGING AND RADIOTELEPHONE SERVICE

Description

Part 22, subpart E contains licensing, technical, and operational rules for the Paging and Radiotelephone Service (PARS).¹⁵⁷ Most of the application filing rules were moved from this subpart to Part 1 in connection with implementation of electronic filing procedures and the Universal Licensing System.¹⁵⁸ This service was originally titled the “Domestic Public Land Mobile Radio Service” (DPLMRS). The allocations covered by subpart E are primarily used for tone, voice, numeric, and alphanumeric paging services. In general, the rules in this subpart: (1) specify the frequency bands allocated to PARS; (2) provide methods for determining the reliable service area and interfering contour of individual stations; (3) establish construction and commencement of operation requirements for licensees; and (4) define technical limits on operation (*e.g.*, transmitter power) to reduce the likelihood of interference.

The PARS rules have evolved over the years. The PARS rules currently focus primarily upon paging. There are also rules pertaining to the operation of internal point-to-point and point-to-multipoint fixed links that are essential for local and regional paging systems.

Part 22, subpart E is organized into six groups of rules. The first group of rules applies to all PARS stations.¹⁵⁹ Each of the subsequent five groups contains technical and operational rules pertaining only to a particular type of operation on specified channels. The types of operation are paging, one- and two-way mobile, point-to-point, point-to-multipoint, and trunked mobile operation. Some of the PARS 454-459 MHz channels are shared with basic exchange telephone radio systems (providing Rural Radiotelephone Service) and potentially with non-geostationary low earth orbit (“Little LEO”) satellite downlinks.

Purpose

The purpose of subpart E is to facilitate the provision of commercial one-way and two-way wireless telecommunications services, in particular, one-way paging, to the general public at reasonable rates by: (1) utilizing a competitive bidding process to issue exclusive licenses to the service provider applicants who value them most; (2) preserving and enhancing competition between these service providers once licensed; (3) ensuring that available spectrum allocations are used efficiently; and (4) reducing the likelihood of harmful interference among licensed stations.

¹⁵⁷ 47 C.F.R. Part 22, subpart E.

¹⁵⁸ See *ULS Report and Order*, 13 FCC Rcd 21027.

¹⁵⁹ 47 C.F.R. §§ 22.501-22.529.

Analysis

Status of Competition

PARS stations governed by subpart E compete directly with Part 90 commercial paging services and with Part 24 narrowband PCS, and they compete indirectly with other CMRS. The *Ninth Report* notes that paging carriers have been experiencing financial difficulties as a result of the continuing decline in demand for traditional one-way paging services, which have long constituted the bulk of these carriers' revenue, as well as intense competition from other mobile data providers in the market for more advanced mobile data services.¹⁶⁰ Paging carriers have sought to compete with each other and with other mobile data providers by offering advanced, two-way mobile data services and by upgrading their networks to allow for these services.¹⁶¹

Advantages

The PARS rules provide a clear, predictable regulatory structure for the assignment and use of the spectrum allocated to PARS service. Provision for accepting competing mutually exclusive applications and selecting the licensee by means of competitive bidding results in licenses being issued to the entities that value them the most. Geographic area licensing minimizes the administrative burden involved in obtaining a license. The technical rules allow transition to narrowband technology capable of providing wireless data services.

Disadvantages

The PARS rules impose some burdens related to compliance with technical and operational rules. Although the Commission converted the authorization of the PARS from the original site-by-site procedure to a geographic area licensing process, several detailed technical rules related to the site-by-site procedure have been retained in order to protect the investment of grandfathered incumbent licensees in areas where the geographic licensee is a different entity.

Recent Efforts

See Part 22 – Public Mobile Services “Recent Efforts” discussion, *supra*.

Comments

No comments were filed with respect to this subpart.

¹⁶⁰ See *Ninth CMRS Competition Report*, FCC 04-216 at ¶¶ 177-178.

¹⁶¹ See *id.* at ¶¶ 178-179.

Recommendation

The various Part 22, subpart E rules concern licensing, technical, and operational rules relating to channel usage and operational or interference-related issues among Part 22 paging licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 22 rules are “no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service.”

PART 22, SUBPART F – RURAL RADIOTELEPHONE SERVICE

Description

Part 22, subpart F¹⁶² contains licensing, technical, and operational rules for the Rural Radiotelephone (Rural Radio) Service. The rules contain provisions governing eligibility, assignment of channels, and management of interference.

The Rural Radio service is the only service regulated under Part 22 that is a fixed service. Rural Radio service makes basic telephone service available to persons who live in remote rural locations where it is not feasible, because of cost, environmental factors, or other practical concerns, to provide such service by wire. The rules provide that Rural Radio interoffice stations can also be used to link central offices where wireline links are similarly infeasible.

Two types of facilities are authorized in the Rural Radio service – conventional Rural Radio stations and basic exchange telephone radio systems (BETRS). Conventional Rural Radio stations may be licensed to any existing or proposed common carrier. These stations operate on exclusively assigned paired channels and are considered for regulatory purposes to be interconnected to, but not a part of, the local loop. Consequently, conventional Rural Radio stations do not have to meet state requirements affecting the local loop (*e.g.*, call blocking, transmission quality).

BETRS facilities may only be licensed to entities that have been state certified to provide local exchange service in the geographic area in question (*e.g.*, LECs and CLECs). BETRS also operate on exclusively assigned paired channels, but they are considered, for regulatory purposes, to be a part of the local loop, and therefore must meet state standards applicable to the local loop.

Purpose

The purpose of the Rural Radio rules is to facilitate provision of telephone service to persons who live in remote rural locations where it is infeasible to provide service by wire.

Analysis

Status of Competition

The Rural Radio service is generally used only as a last resort in the most remote rural areas where wireline telephone service is infeasible or not cost-effective. While historically, Rural Radio customers have had few if any competitive alternatives for provision of telephony due to their geographic isolation, other wireless services, such as

¹⁶² 47 C.F.R. Part 22, subpart F.

cellular and PCS, have begun to expand into areas served by Rural Radio, and availability of competitive alternatives is likely to increase in the future, especially with the implementation of the *Rural Report and Order*.

Advantages

The rules in Part 22, subpart F provide a clear, predictable structure for the assignment and use of the spectrum co-allocated to the Rural Radio service to provide basic telephone service to persons who live in remote rural locations.

Disadvantages

Certain of the rules concerning Rural Radio appear to have become outdated as a result of technological developments since the rules were adopted.

Recent Efforts

See Part 22 – Public Mobile Services “Recent Efforts” discussion, *supra*.

Comments

No comments were filed with respect to this subpart.

Recommendation

The Part 22, subpart F rules are licensing, technical, and operational in nature. These rules are concerned with licensing procedures, set technical and operational standards, and protect against interference among Part 22 rural radio service licensees as well licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 22 rules are “no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service.”

PART 22, SUBPART G – AIR-GROUND RADIOTELEPHONE SERVICE**Description**

Part 22, subpart G¹⁶³ contains licensing, technical, and operational rules for the Air-Ground Radiotelephone Service (AGS). AGS provides commercial telephone service to persons in airborne aircraft, using telephone instruments that are permanently mounted in the aircraft.

AGS consists of two separate parts: General Aviation air-ground stations and Commercial Aviation air-ground systems. General Aviation air-ground stations serve only “general aviation” aircraft (aircraft owned by individuals or businesses for their own use that do not carry passengers for hire). These stations operate independently rather than as a system. Consequently, when an aircraft flies out of range of a ground station, any call in progress disconnects, and the user must then redial through another ground station.

Commercial Aviation air-ground systems are permitted to serve any type of aircraft, but primarily serve passengers aboard commercial airlines. Commercial Aviation systems use seat-back and bulkhead-mounted telephones often seen on commercial flights. Commercial aviation air-ground systems are all nationwide systems and calls in progress handoff from one ground station to another uninterrupted as the aircraft flies across the country.

In general, the subpart G rules: (1) specify the frequency bands allocated to the General Aviation and Commercial Aviation air-ground services; (2) provide separation distance criteria for determining where new ground stations may be established; (3) establish minimum construction or coverage requirements for licensees; and (4) set forth certain technical limits on operation (e.g., transmitter power).

Purpose

Subpart G facilitates the provision of commercial telephone service to persons aboard airborne aircraft.

Analysis**Status of Competition**

Although the Commission dedicated specific spectrum to commercial air-ground service and contemplated the presence of six competing licensees, only one licensee currently provides service. At the same time, the Commission has seen increased interest from a number of airlines in the possible liberalization of the Commission’s rules in this area.

¹⁶³ 47 C.F.R. Part 22, subpart G.

A potential source of competition in the air-ground sector may be provided by AirCell, Inc. AirCell does not operate on AGS frequencies, but was granted a waiver in 1998 to provide air-ground service using specialized equipment that operates on cellular frequencies.¹⁶⁴

Advantages

The AGS rules provide a clear, predictable structure for the assignment and use of the air-ground spectrum allocation.

Disadvantages

The AGS rules include highly specific requirements for the technical configuration of air-ground systems and the use of air-ground channels that may inhibit licensee flexibility and technical innovation.

Recent Efforts

On December 15, 2004, the Commission adopted a *Report and Order*, which substantially revises the rules governing the Air-Ground Radiotelephone Service.¹⁶⁵ Specifically, the Commission decided to auction new licenses for the four megahertz of commercial air-ground spectrum in three possible band plan configurations and proposed auction rules for this spectrum. The ultimate band configuration will be determined based on the results of the auction. However, in order to further competition and ensure maximum use of the frequency band for air-ground services, the Commission imposed an eligibility limitation to prevent a single entity from holding new licenses for all four megahertz of air-ground spectrum. In a related concurrent action, the Commission announced that it would consider whether to revise or eliminate its current ban on the use of cellular telephones on airborne aircraft.¹⁶⁶

Comments

No comments were filed with respect to this subpart.

¹⁶⁴ In the Matter of AirCell, Inc., Petition Pursuant to Section 7 of the Act, for a Waiver of the Airborne Cellular Rule, or, in the Alternative for a Declaratory Ruling, *Order*, 14 FCC Rcd 806 (WTB 1998) (*AirCell Order*), *affirmed*, *Memorandum Opinion and Order*, 15 FCC Rcd 9622 (2000).

¹⁶⁵ See FCC News Release, *FCC Paves the Way for New Broadband Services in the Air* (rel. Dec. 15, 2004).

¹⁶⁶ FCC News Release, *FCC to Examine Ban on Using Cellular Telephones on Airborne Aircraft* (rel. Dec. 15, 2004).

Recommendation

The Part 22, subpart G rules govern the licensing and operation of air-ground radiotelephone stations and systems. As noted above, the Commission adopted a *Report and Order* on December 15, 2004, which substantially revises these rules.¹⁶⁷ Accordingly, we take no further action on these rules at this time.

¹⁶⁷ See FCC News Release, *FCC Paves the Way for New Broadband Services in the Air* (rel. Dec. 15, 2004).

PART 22, SUBPART H – CELLULAR RADIOTELEPHONE SERVICE

Description

Part 22, subpart H¹⁶⁸ contains licensing, technical, and operational rules for the Cellular Radiotelephone Service (cellular service).

The spectrum allocated to the cellular service is divided into two channel blocks, A and B. This was done to provide for two competing, facilities-based providers in each licensing area. Initially, the cellular license for the B channel block in each licensing area was issued to the wireline telephone company in that area and the license for the A channel block was issued to a company other than that wireline telephone company. There were multiple A block applicants in most markets, and the initial licensee was selected by comparative hearings for the first (largest) 30 markets. Random selection (lottery) was used in the remaining markets. After Congress authorized the Commission to select among mutually exclusive applications using competitive bidding (auctions), the Commission began using auctions instead of lotteries to award licenses in the cellular service.

In general, the rules in Part 22, subpart H: (1) specify the frequency bands allocated to the cellular service; (2) provide methods for determining the Cellular Geographic Service Area (protected service area) of each system; (3) establish minimum construction and coverage requirements for cellular licensees; and (4) set forth certain technical limits on operation (*e.g.*, transmitter power).

Purpose

Subpart H facilitates the provision of commercial cellular services to the general public at reasonable rates, by: (1) utilizing a competitive bidding process to issue exclusive licenses to the service provider applicants who value them most; (2) preserving and enhancing competition between these service providers once licensed; (3) ensuring that available spectrum allocations are used efficiently; and (4) requiring coordination procedures to prevent harmful interference among cellular systems.

Analysis

Status of Competition

As detailed in the *Ninth CMRS Competition Report*, CMRS providers operate in an environment that is marked by significant and increasing competition in mobile telephony, paging/messaging, and mobile data.¹⁶⁹ As several of the largest providers of mobile telephony in the country have combined cellular service and PCS into single

¹⁶⁸ 47 C.F.R. Part 22, subpart H.

¹⁶⁹ See *Ninth CMRS Competition Report*, FCC 04-216 at ¶¶ 167-197.

networks, it is no longer accurate to view cellular telephone service as separate and distinct from service provided using PCS licenses. Mobile telephony service providers compete with each other on the basis of pricing plans, geographic coverage, and operational features. As detailed in the *Spectrum Aggregation Limits Order*, the Commission has found that there is meaningful economic competition in urban markets generally and that cellular carriers no longer enjoy significant advantages in these areas. The Commission, however, stated that rural markets are much less competitive than urban markets and that cellular incumbents generally continue to dominate in rural areas.¹⁷⁰

Advantages

The rules provide a clear, predictable structure for the assignment and use of cellular spectrum. The rules provide for accepting competing, mutually exclusive applications for unserved areas and selecting the licensee by means of competitive bidding; in this manner, licenses are issued to the entities that value them the most. In addition, the rules contain minimal and flexible technical standards for alternative cellular technologies that facilitate the introduction of digital service and new features. Further, the rules seek to preserve competitive choices for consumers.

Disadvantages

The cellular rules impose some administrative burdens inherent in the cellular licensing process and necessary for compliance with technical and operational rules.

Recent Efforts

On February 12, 2004, the Commission released the *Part 22 Cellular Biennial Review Order on Reconsideration*,¹⁷¹ resolving various petitions for reconsideration of the *2000 Part 22 Cellular Biennial Review Order*.¹⁷² In the order, the Commission affirmed the decision to establish a five-year sunset period for the removal of the Commission's requirement that cellular carriers provide analog service. The Commission also affirmed the decision to remove the rule section governing electronic serial numbers (ESNs) in cellular telephones, but clarified that fraudulent and unauthorized use of ESNs was unlawful. Further, the Commission reconsidered and adopted a proposal to permit, in certain circumstances, cellular carriers to extend into neighboring unserved areas without prior Commission approval.

¹⁷⁰ *Spectrum Aggregation Limits Order*, 16 FCC Rcd at 22669-70 ¶ 2, 22670 ¶ 5.

¹⁷¹ Year 2000 Biennial Regulatory Review – Amendment of Part 22 of the Commission's Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and other Commercial Mobile Radio Services, WT Docket No. 01-108, *Order on Reconsideration*, 19 FCC Rcd 3239 (2004).

¹⁷² Year 2000 Biennial Regulatory Review - Amendment of Part 22 of the Commission's Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and other Commercial Mobile Radio Services, WT Docket No. 01-108, *Report and Order*, 17 FCC Rcd 18401 (2002) (*2000 Part 22 Cellular Biennial Review Order*).

On September 27, 2004, the Commission released the *Rural R&O and FNPRM*, adopting measures to facilitate the deployment of wireless services in rural areas including the elimination of the cellular cross-interest rule in RSAs and an increase in permissible power levels for base stations in certain wireless services that are located in rural areas or that provide coverage to otherwise unserved areas.¹⁷³

42. On December 15, 2004, the Commission announced that it would consider whether to revise or eliminate its current ban on the use of cellular telephones on airborne aircraft.¹⁷⁴ In a related concurrent action the Commission restructured the rules for the air-ground radio telephone service, and proposed auction rules for that spectrum.¹⁷⁵ The *Notice of Proposed Rulemaking* commencing the Commission's review of its rules prohibiting the use of cellular telephones on airborne aircraft is expected to be released in early 2005.¹⁷⁶

Comments

No comments were filed with respect to this subpart.

Recommendation

The Part 22, subpart H rules govern licensing in the cellular service and are technical and operational in nature. Specifically, these rules are concerned with licensing procedures, set technical and operational standards, and protect against interference among Part 22 cellular licensees as well licensees in adjacent services. As such, the need and purposes for these rules are not affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 22 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

¹⁷³ *Rural R&O and FNPRM*, 19 FCC Rcd 19078 (2004).

¹⁷⁴ FCC News Release, *FCC to Examine Ban on Using Cellular Telephones on Airborne Aircraft* (rel. Dec. 15, 2004).

¹⁷⁵ *Id.*

¹⁷⁶ FCC News Release, *Instructions on Submitting Public Comments in the FCC's Review of the Use of Cellular Telephones on Airborne Aircraft* (Docket No. WT 04-435) (rel. Dec. 23, 2004).

PART 22, SUBPART I – OFFSHORE RADIOTELEPHONE SERVICE**Description**

Part 22, subpart I¹⁷⁷ governs the licensing and operation of offshore radiotelephone stations. The Offshore Radiotelephone Service allows CMRS providers to use conventional duplex analog technology to provide telephone service to subscribers located on (or in helicopters en route to) oil exploration and production platforms in the Gulf of Mexico.

Purpose

The purpose of the subpart I rules is to establish basic rules and procedures for the licensing and operation of offshore radiotelephone stations.

Analysis**Status of Competition**

There are several competitive alternatives to Offshore Radiotelephone service in the Gulf. Two cellular companies currently operate in the Gulf of Mexico Service Area (GMSA), and some SMR service providers also operate there on a site-by-site basis. The Commission is also considering licensing in the Gulf in several other spectrum bands, including PCS and the 700 MHz band.¹⁷⁸

Advantages

The subpart I rules provide a clear, predictable structure for the assignment and use of Offshore Radio spectrum.

Disadvantages

The subpart I rules impose limited administrative and technical burdens that are inherent in the licensing process and necessary for compliance with technical and operational rules.

Recent Efforts

See Part 22 – Public Mobile Services “Recent Efforts” discussion, *supra*.

Comments

No comments were filed with respect to this subpart.

¹⁷⁷ 47 C.F.R. Part 22, subpart I.

¹⁷⁸ Service is provided by other services as well: e.g., WCS, satellite, VHF maritime, private radio (formerly petroleum radio service), private (offshore), and microwave.

Recommendation

The Part 22, subpart I rules are procedural, technical, and operational in nature. These rules are concerned with licensing procedures, set technical and operational standards, and protect against interference among Part 22 offshore radiotelephone licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 22 rules are “no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service.”